

## 2. SITE BACKGROUND

### 2.1 LOCATION

Anomaly Area 3 encompasses an area of approximately 9 acres and is located in the northwestern section of the former MCAS El Toro facility near Pusan Way, adjacent to the Agua Chinon Wash (Figure 2-1). AA 3 has also been designated as miscellaneous refuse (MSCR) 1, a "former refuse disposal area" in the *BRAC Business Plan* update (DoN 2000). Miscellaneous refuse AA 3 refers to seven aerial photograph (APHO) anomaly areas (APHO 59, APHO 60, APHO 61, APHO 62, APHO 63, APHO 64, and APHO 65) identified by Science Applications International Corporation (SAIC) during a review of historical aerial photographs taken between 1946 and 1992 (SAIC 1993). These aerial photographs and their corresponding anomalies are listed in Table 2-1.

Table 2-1: APHO List

SAIC Photograph Year	APHO Anomaly ID	Description of the Anomaly
1946	APHO 59 (SAIC 20)	An area encompassing three areas of apparent extraction
1952	APHO 60 (SAIC 64)	Quarried extraction areas
1960	APHO 61 (SAIC 106)	Quarried extraction areas
1967	APHO 62 (SAIC 156)	An area of extraction near Agua Chinon Wash with possible refuse or liquid within the excavated area
1981	APHO 63 (SAIC 443)	An area of extraction near Agua Chinon Wash that has been revegetated
1988	APHO 64 (SAIC 536)	A former extraction area near Agua Chinon Wash that has been filled
1992	APHO 65 (SAIC 564)	A graded area

The aerial photograph anomalies identified by SAIC report and are associated with AA 3 include features that are not contiguous with the study boundary. These non-contiguous anomaly features are shown on Figure 2-1 and are discussed below.

These non-contiguous features include the following anomalies: APHO60-1952C, APHO60-1952D, APHO61-1960A, APHO61-1960B, APHO61-1960C, APHO61-1960E, APHO61-1960F and APHO62-1967B. All other anomalies associated with these APHOs (APHO59-1946A, APHO59-1946B, APHO59-1946C, APHO60-1952A, APHO60-1952B, APHO61-1960C, APHO62-1967A, APHO63-1981A APHO64-1988A, and APHO65-1992A) lie within the AA 3 investigation boundary.

#### 2.1.1 APHO 60

APHO 60 corresponds to anomaly SAIC 64 of the 1952 SAIC aerial photograph (Table 2-1). This APHO60 is associated with three anomalies; APHO60-1952A, APHO60-1952B, and APHO60-1952C and were identified as extraction areas. These are presented in the Figure 2-1.

**APHO60-1952C**, an extraction area, is located east of the currently demarcated AA 3 site. The Wherry Housing Area presently occupies part of this area. Based on a review of aerial photographs taken through 1971, this area of apparent extraction remained unfilled. In addition, the 1972 Wherry Housing grading plans show this anomaly as requiring engineered

backfill. Based on this evaluation, it is unlikely that this area would contain construction debris. As a result no further investigation is recommended.

**APHO60-1952D.** A review of the 1952 SAIC photograph shows the presence of another anomaly identified as SAIC 66. The anomaly designated as APHO60-1952D, is shown in Figure 2-1 and is located southwest of the current study boundary. The SAIC report identifies this anomaly as a 250 feet long trench.

A review of subsequent aerial photographs and the 1978 grading plans for Building 722 show that this area had not been filled. This area subsequently graded (cut) as part of asphalt paving around the building. Based on these observations it is unlikely that construction debris was placed within this trench and no further investigation of this area is recommended.

### 2.1.2 APHO 61

APHO 61 corresponds to the 1960 SAIC aerial photograph anomaly SAIC 106 (Table 2-1). There are two anomalies associated with APHO 61 and these two areas are identified as APHO61-1960A and APHO61-1960B and are presented in the Figure 2-1.

**APHO61-1960A**, a quarry (extraction) area, is located outside the Station boundary to the west of AA 3 site. The SAIC report describes APHO61-1960A as an area probably used as a material source for the MCAS El Toro construction activities. This anomaly is not within the general vicinity of AA 3 (see Figure 2-1). A review of the subsequent aerial photographs does not yield evidence of this feature persisting or any backfilling activities at this area. This area was not identified as an anomaly in any of the subsequent aerial photographs, no further investigation is recommended.

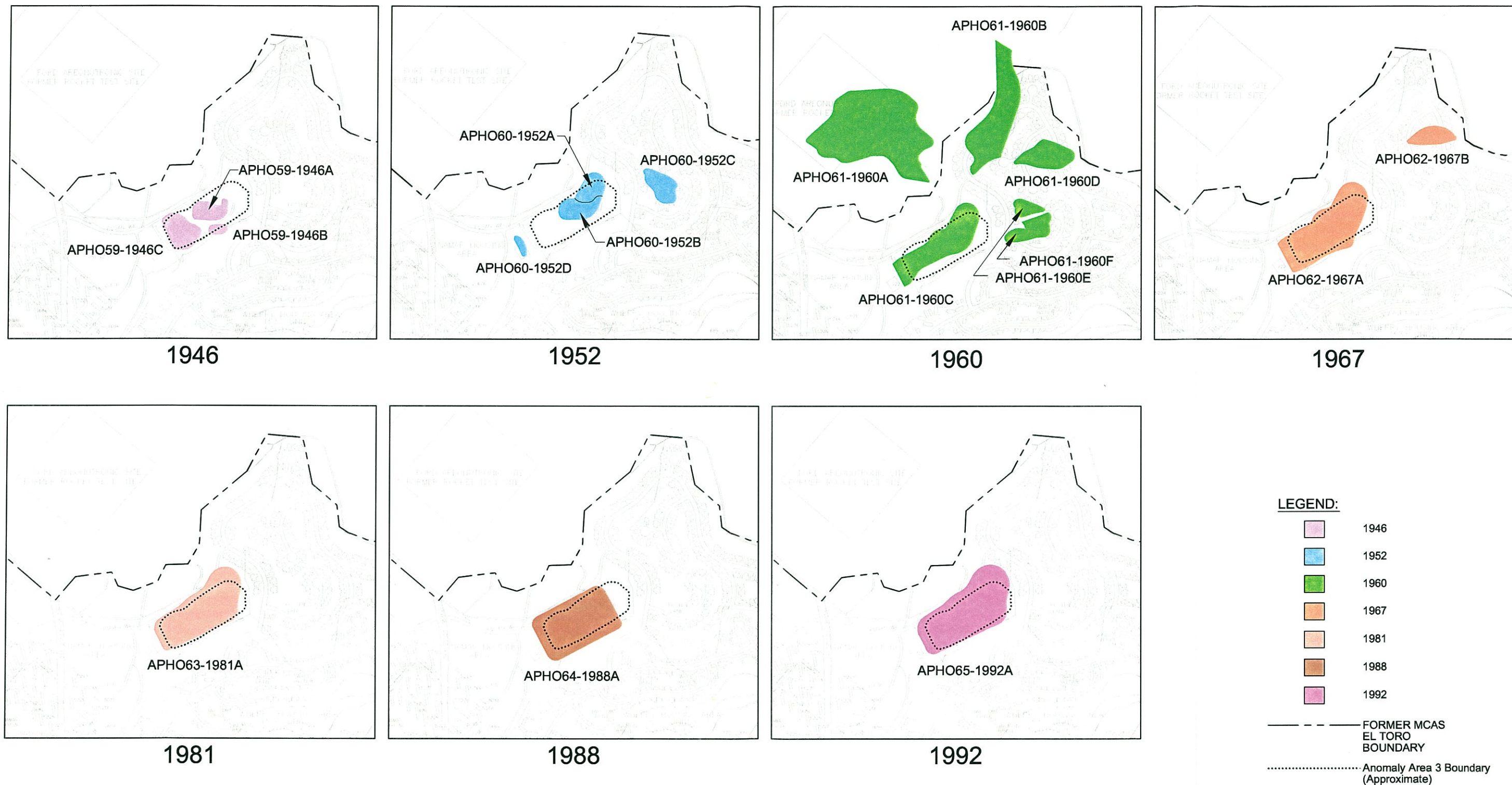
**APHO61-1960B** is described as a cleared area (grading) for cultivation and is located north of AA 3 site. This anomaly is not within the general vicinity of AA 3 (see Figure 2-1). Similar to APHO61-1960A, a review of the subsequent aerial photographs did not yield evidence of this feature persisting or any other activities conducted at this area. This area was not identified as an anomaly in any of the subsequent aerial photographs. This area was subsequently graded in 1972-1973 as part of the construction of Wherry Housing. Based on these observations, no further investigation of these areas is recommended.

**APHO61-1960D, APHO61-1960E, and APHO61-1960F.** These anomalies are part of SAIC Anomaly 107 and were identified in the 1960 aerial photograph. These anomalies are located within the Wherry Housing area, and correspond to locations of cleared/disturbed ground. These areas appear to remain unfilled through to 1971. In addition, 1973 construction drawings for the Wherry Housing indicate that these areas were part of grading operations. It is unlikely that these areas would have been backfilled with construction debris or waste, therefore, no further investigation is recommended.

### 2.1.3 APHO 62

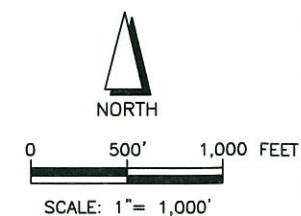
APHO 62 corresponds to the 1967 SAIC aerial photograph anomaly SAIC 155 (APHO62-1967B in Figure 2-1).

**APHO62-1967B (SAIC 155).** This area corresponds to the following anomalies APHO60-1952D and APHO61-1960D, and lies within the Wherry Housing area. This area was part of grading operations for the Wherry Housing, therefore, no further investigation is recommended for this area.



**NOTES:**

Anomalies depicted are approximate and based on aerial photographic interpretations from 1946 through 1992, (SAIC 1993)



ESI Report		Draft	
Site Location Map			
Removal Site Evaluation for Anomaly Area 3			
Date	11-03	MCAS El Toro	
Project No.		Figure	
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## 2.2 LAND USE

Historically, AA 3 was used as a source of borrow material. Records indicate that some of the borrow pits and trenches were backfilled with construction debris and later covered with 5 feet or more of fill soil (IT/OHM 2000). Based on a review of historical aerial photographs and topographic maps, placement of construction debris occurred between 1972 and 1988. Interviews with former Station personnel indicate that construction debris generated during the construction of the investigation-derived waste (IDW) management area at IRP Site 3 was placed at AA 3.

## 2.3 GEOLOGY

Former MCAS El Toro lies on the southeastern edge of the Tustin Plain, a gently sloping surface of alluvial fan deposits derived mainly from the Santa Ana Mountains. Silts and clays predominate in the central and northwestern portion of former MCAS El Toro, and sands predominate in areas near the foothills. Sandstone and siltstone bedrock outcrops in the foothills. The sands are generally well-graded and commonly contain clay lenses.

## 2.4 HYDROGEOLOGY

Former MCAS El Toro is located within the Irvine Groundwater Forebay, which has been designated by the CRWQCB as a public water supply source (CRWQCB 1995). The aquifer located directly beneath former MCAS El Toro is not currently used for municipal water supply; however, groundwater near the Station is used for agricultural purposes.